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THE UNIVERSITY OF NORTH CAROLINA AT CHAPEL HILL

COLLEGE OF ARTS AND SCIENCES

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Re HB6485: AN ACT CONCERNING THE CONNECTICUT HYDROGEN AND ELECTRIC AUTOMOBILE PURCHASE REBATE. To study ways to ensure the equitable distribution of rebates under the Connecticut hydrogen and electric automobile purchase rebate program.

Dear Members of the Transportation Committee,

I would like to thank co- chairs, Representative Lemar, Senator Haskell, vice chairs - Senator Cassano and Representative Sims and ranking members, Representative Carney and Senator Somers for the opportunity to submit written testimony in support of SB-4 - an act concerning the Connecticut Clear Air Act.

My name is Allie Thomas. I am an assistant professor in the Department of City and Regional Planning at the University of North Carolina at Chapel Hill. One of areas I study is alternative transportation such as electric bikes. In 2015, I conducted an electric bike or e-bike study at UC Davis where I was a postdoctoral scholar. The study focused specifically on parents and caretakers. I wanted to understand how they used their e-bikes like they would a minivan—taking their children to and from school, soccer practice, the park, etc. I ended up speaking with 20 parents and caretakers living in the San Francisco Bay Area. At that time, it was difficult to find them. Now, e-bikes are prevalent in the US.

The following are key takeaways that demonstrate that with the right support these e-bikes can make a difference in people's lives and could be a substitute for a car.

- Parents used e-bikes like a minivan. Half of the participants in my survey were women and they loved their e-bike. They could avoid the insanity-inducing drop off/pick up line at school. They could run errands. They could make impromptu stops at the library or park without having to worry about parking. With a larger e-bike, they could even carry their child's friend.
- Women felt safer using e-bikes. Women in the US do not bike. Having an electric assist on their bikes allowed them to go anywhere in their neighborhoods without fear. No place was off-limits. Those with cargo bikes felt more visible on the roads, and thus, safer. They could go at faster speeds when necessary and they had the option to take an alternative route—a quieter, hilly road could be used instead of a busy, high-speed street.
- Parents health benefited from an e-bike. Better interactions with their children were possible with an electric bike. They were able to get more physical activity, which studies have shown improves mental health. In one case, a mother gave her teenage sons her car so she could e-bike to work.
- The price point was not for everyone. One of the biggest challenges was price. Bay Area parents in my study took into consideration the costs of car repairs, insurance, gas, and parking and took a chance on the e-bike. Their e-bikes cost between \$1,500-\$10,000. They had higher incomes but still need to justify the cost.

Rebates have been a great tool to growing the electric car market, as California is now the largest EV market in the US. As you may know, California only recently allowed rebates for e-bikes purchases. Connecticut can learn from this mistake and make e-bikes more affordable sooner and to environmental justice communities.

Sincerely,

Alainna Thomas

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